

Amendments to the Claims

1. (Currently amended) A facet implant comprising:
 - a superior implant having an articulating surface and a fixation surface and being configured for placement on a superior articular facet;
 - an inferior implant having an articulating surface and a fixation surface and being configured for placement on an inferior articular facet and for interacting with a translaminar fixation mechanism, ~~whereby the articulating surface of the superior implant and the articulating surface of the inferior implant are configured to interact;~~
 - and
 - a translaminar fixation mechanism for securing the inferior implant to the inferior articular facet;
 - wherein the articulating surface of the inferior implant and the articulating surface of the superior implant are each configured for multiple direction articulation with the other.
2. (Previously presented) The facet implant of claim 1 wherein the translaminar fixation mechanism comprises at least one of: a translaminar screw, a bolt or a fixation pin.
3. (Previously presented) The facet implant of claim 2 wherein the inferior implant is configured to interact with the translaminar fixation mechanism such that the translaminar fixation mechanism ranges from about 0 degrees to about 15 degrees offset.
4. (Previously presented) The facet implant of claim 1 wherein at least one of the superior implant or the inferior implant comprises a surface fixation mechanism.
5. (Previously presented) The facet implant of claim 4 wherein the surface fixation mechanism comprises at least one of: one or more pegs, one or more pips, ridges, or one or more screws.

6. (Previously presented) The facet implant of claim 4 wherein the surface fixation mechanism comprises multiple regions wherein each of the regions has at least one ridge oriented in a different direction than the ridges of the other regions.

7. (Previously presented) The facet implant of claim 1 wherein at least one of the fixation surfaces of the inferior implant and the superior implant has at least one of: a porous coating, a porous onlay material, a biologic coating, or a surface treatment.

8. (Previously presented) The facet implant of claim 1 wherein the articulating surface of the superior implant is generally curved.

9. (Previously presented) The facet implant of claim 1 wherein the fixation surface of the superior implant is generally curved.

10. (Previously presented) The facet implant of claim 1 wherein the articulating surface of the inferior implant is generally curved.

11. (Previously presented) The facet implant of claim 1 wherein at least one of the articulating surfaces of the inferior implant and the superior implant is composed of at least one of: cobalt-chromium alloy, ceramic, UHMWPE, pyrolytic carbon, or Ti/Al/V.

12. (Previously presented) The facet implant of claim 1 wherein the inferior implant ranges from about 2 mm thick to about 15 mm thick.

13. (Previously presented) The facet implant of claim 1 wherein the superior implant ranges from about 2 mm thick to about 15 mm thick.

14. (Currently amended) A facet implant comprising:

a superior implant having a fixation surface and a generally curved articulating surface, the superior implant being configured for placement on a resurfaced articulating surface of a superior articular facet; and

an inferior implant having a fixation surface and a generally convex articulating surface, the inferior implant being configured for placement on a resurfaced articulating surface of an inferior articular facet; ~~whereby the generally curved articulating surface of the superior implant and the generally convex articulating surface of the inferior implant being configured to interact~~

wherein the articulating surface of the inferior implant and the articulating surface of the superior implant are each configured for multiple direction articulation with the other.

15. (Previously presented) The facet implant of claim 14 wherein at least one of the superior implant and the inferior implant comprises a surface fixation mechanism.

16. (Previously presented) The facet implant of claim 15 wherein the surface fixation mechanism comprises at least one of: one or more pegs, one or more pips, ridges, or one or more screws.

17. (Previously presented) The facet implant of claim 15 wherein the surface fixation mechanism comprises multiple regions wherein each of the regions has at least one ridge oriented in a different direction than the ridges of the other regions.

18. (Previously presented) The facet implant of claim 14 wherein at least one of the fixation surfaces of the inferior implant and the superior implant has at least one of: a porous coating, a porous onlay material, a biologic coating, or a surface treated to facilitate bone ingrowth.

19. (Previously presented) The facet implant of claim 14 wherein at least one of the articulating surfaces of the inferior implant and the superior implant is composed of at least one of: cobalt-chromium alloy, ceramic, UHMWPE, pyrolytic carbon, or Ti/Al/V.

20. (Currently amended) A facet implant comprising:

a superior implant having a fixation surface and a generally curved articulating surface, the superior implant being configured for placement on a resurfaced articulating surface of a superior articular facet;

an inferior implant having a fixation surface and a generally convex articulating surface, the inferior implant being configured for placement on a resurfaced articulating surface of an inferior articular facet and for interacting with a translaminal screw, ~~the articulating surface of the superior implant and the articulating surface of the inferior implant being configured to interact;~~ and

a translaminal ~~fixation mechanism~~ screw for securing the inferior implant to the inferior articular facet;

wherein the articulating surface of the inferior implant and the articulating surface of the superior implant are each configured for multiple direction articulation with the other.

21 – 40. (Cancelled).

41. (Currently amended) A facet implant comprising:

~~superior implant~~ means for providing an artificial articulating surface on a superior articular facet;

~~inferior implant~~ means for providing an artificial articulating surface on an inferior articular facet that is configured for multiple direction articulation with the artificial articulating surface on the superior articular facet; and

~~means for securing the inferior implant~~ means to the inferior articular facet via a lamina connected to the inferior articular facet.

42. (Currently amended) The facet implant of claim 41 wherein the means for securing the inferior ~~implant~~ means to the inferior articular facet comprises at least one of: a screw, a bolt or a fixation pin.

43. (Currently amended) The facet implant of claim 41 wherein at least one of the superior ~~implant means for providing an artificial articulating surface on a superior articular facet~~ or the inferior ~~implant means for providing an artificial articulating surface on an inferior articular facet~~ comprises a surface fixation mechanism.

44. (Previously presented) The facet implant of claim 43 wherein the surface fixation mechanism comprises at least one of: one or more pegs, one or more pips, ridges, or one or more screws.

45. (Currently amended) The facet implant of claim 41 wherein at least one of the superior ~~implant means for providing an artificial articulating surface on a superior articular facet~~ or the inferior ~~implant means for providing an artificial articulating surface on an inferior articular facet~~ comprises a fixation surface having at least one of: a porous coating, a porous onlay material, a biologic coating, or a surface treatment.

46. (Currently amended) The facet implant of claim 41 wherein at least one of the superior ~~implant means for providing an artificial articulating surface on a superior articular facet~~ or the inferior ~~implant means for providing an artificial articulating surface on an inferior articular facet~~ comprises an articulating surface composed of at least one of: cobalt-chromium alloy, ceramic, UHMWPE, pyrolytic carbon, or Ti/Al/V.

47. (Currently amended) A facet implant comprising:

~~a superior implant means for providing an artificial articulating surface on a superior articular facet~~, the superior ~~implant means~~ having a fixation surface and a generally curved articulating surface, the superior ~~implant means~~ being configured for placement on a resurfaced articulating surface of a superior articular facet such that the superior ~~implant means~~ primarily contacts only the articulating surface of the superior articulating facet; and

~~an inferior implant means for providing an artificial articulating surface on an inferior articulating facet~~ that is configured for multiple direction articulation with the artificial articulating surface on the superior articular facet, the inferior ~~implant means~~

having a fixation surface and a generally convex articulating surface, the inferior ~~implant~~ means being configured for placement on a resurfaced articulating surface of an inferior articular facet such that the inferior ~~implant~~ means primarily contacts only the articulating surface of the inferior articulating facet;

wherein the generally curved articulating surface of the superior ~~implant~~ means and the generally convex articulating surface of the inferior ~~implant~~ means are configured for articulating interaction.

48. (Currently amended) The facet implant of claim 47 wherein at least one of superior ~~implant~~ means ~~for providing an artificial articulating surface on a superior articular facet~~ or the inferior ~~implant~~ means ~~for providing an artificial articulating surface on an inferior articular facet~~ comprises a surface fixation mechanism.

49. (Previously presented) The facet implant of claim 48 wherein the surface fixation mechanism comprises at least one of: one or more pegs, one or more pips, ridges, or one or more screws.

50. (Currently amended) The facet implant of claim 47 wherein at least one of the superior ~~implant~~ means ~~for providing an artificial articulating surface on a superior articular facet~~ or the inferior ~~implant~~ means ~~for providing an artificial articulating surface on an inferior articular facet~~ comprises a fixation surface having at least one of: a porous coating, a porous onlay material, a biologic coating, or a surface treatment.

51. (Currently amended) The facet implant of claim 47 wherein at least one of the superior ~~implant~~ means ~~for providing an artificial articulating surface on a superior articular facet~~ or the inferior ~~implant~~ means ~~for providing an artificial articulating surface on an inferior articular facet~~ comprises an articulating surface composed of at least one of: cobalt-chromium alloy, ceramic, UHMWPE, pyrolytic carbon, or Ti/Al/V.

52. (Currently amended) The facet implant of claim 47 further comprising means for securing the inferior ~~implant~~ means to the inferior articular facet via a lamina connected to the inferior articular facet.

53. (Currently amended) A facet implant comprising:

a superior ~~implant~~ means for providing an artificial articulating surface on a superior articular facet, the superior ~~implant~~ means having a fixation surface and a generally convex articulating surface, the superior ~~implant~~ means being configured for placement on a specifically prepared articulating surface of a superior articular facet such that the superior ~~implant~~ means primarily contacts only the articulating surface of the superior articulating facet; and

an inferior ~~implant~~ means for providing an artificial articulating surface on an inferior articulating facet that is configured for multiple direction articulation with the artificial articulating surface on the superior articular facet, the inferior ~~implant~~ means having a fixation surface and a generally curved articulating surface, the inferior ~~implant~~ means being configured for placement on a specifically prepared articulating surface of an inferior articular facet such that the inferior ~~implant~~ means primarily contacts only the articulating surface of the inferior articulating facet;

wherein the generally ~~curved~~ convex articulating surface of the superior ~~implant~~ means and the generally ~~convex~~ curved articulating surface of the inferior ~~implant~~ means are configured for articulating interaction.

54. (Currently amended) The facet implant of claim 53 wherein at least one of the superior ~~implant~~ means for providing an artificial articulating surface on a superior articular facet or the inferior ~~implant~~ means for providing an artificial articulating surface on an inferior articulating facet comprises a surface fixation mechanism.

55. (Previously presented) The facet implant of claim 54 wherein the surface fixation mechanism comprises at least one of: one or more pegs, one or more pips, ridges, or one or more screws.

56. (Currently amended) The facet implant of claim 53 wherein at least one of the superior ~~implant means for providing an artificial articulating surface on a superior articular facet~~ or the inferior ~~implant means for providing an artificial articulating surface on an inferior articular facet~~ comprises a fixation surface having at least one of: a porous coating, a porous onlay material, a biologic coating, or a surface treatment.

57. (Currently amended) The facet implant of claim 53 wherein at least one of the superior ~~implant means for providing an artificial articulating surface on a superior articular facet~~ or the inferior ~~implant means for providing an artificial articulating surface on an inferior articular facet~~ comprises an articulating surface composed of at least one of: cobalt-chromium alloy, ceramic, UHMWPE, pyrolytic carbon, or Ti/Al/V.

58. (Currently amended) The facet implant of claim 53 further comprising means for securing the inferior ~~implant~~ means to the inferior articular facet via a lamina connected to the inferior articular facet.

59. (New) The facet implant of claim 1 wherein the translaminar fixation mechanism is configured to traverse a lamina connected to the inferior articular facet.

60. (New) The facet implant of claim 1 wherein the inferior implant is configured to engage a translaminar fixation mechanism that traverses a lamina connected to the inferior articular facet.

61. (New) The facet implant of claim 1 wherein the translaminar fixation mechanism is configured to traverse a lamina connected to the inferior articular facet.

62. (New) The facet implant of claim 1 wherein the inferior implant is configured to engage a translaminar fixation mechanism that traverses a lamina connected to the inferior articular facet.